

AMENDMENTS TO THE CLAIMS:

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K. Kerr
10/7/03

Please amend the claims as follows:

1. (canceled)
2. (previously presented) A mutant kanamycin nucleotidyltransferase with improved thermostability as compared to SEQ ID NO:1, comprising the amino acid sequence indicated by SEQ ID NO:2.
3. (previously presented) The mutant kanamycin nucleotidyltransferase according to claim 1, comprising the amino acid sequence indicated by SEQ ID NO:3.
- 4-9. (canceled)
10. (previously presented) An isolated mutant kanamycin nucleotidyltransferase comprising the sequence of SEQ ID NO:1 modified by at least one point mutation selected from Met57Leu, Ala62Val, Ser94Pro, Ser203Pro, Asp206Val, His207Gln, Ser220Pro, Ile234Val, and Thr238Ala, and having improved thermostability as compared to SEQ ID NO:1, wherein the sequence of SEQ ID NO:1 is not modified by any other mutations.
11. (previously presented) The mutant kanamycin nucleotidyltransferase according to claim 1, comprising the amino acid sequence indicated by SEQ ID NO:12.

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12. (previously presented) The mutant kanamycin nucleotidyltransferase according to claim 1, comprising the amino acid sequence indicated by SEQ ID NO:13.
13. (previously presented) The mutant kanamycin nucleotidyltransferase according to claim 1, comprising the amino acid sequence indicated by SEQ ID NO:14.
14. (previously presented) The mutant kanamycin nucleotidyltransferase according to claim 1, comprising the amino acid sequence indicated by SEQ ID NO:15.
15. (previously presented) The mutant kanamycin nucleotidyltransferase according to claim 1, comprising the amino acid sequence indicated by SEQ ID NO:16.
16. (previously presented) The mutant kanamycin nucleotidyltransferase according to claim 1, comprising the amino acid sequence indicated by SEQ ID NO:17.
17. (previously presented) The mutant kanamycin nucleotidyltransferase according to claim 1, comprising the amino acid sequence indicated by SEQ ID NO:18.
18. (previously presented) The mutant kanamycin nucleotidyltransferase according to claim 1, comprising the amino acid sequence indicated by SEQ ID NO:19.
19. (previously presented) The mutant kanamycin nucleotidyltransferase according to claim 1, comprising the amino acid sequence indicated by SEQ ID NO:20.
20. (canceled)